

Montpelier City Hall  
Bear Lake County Courthouse  
Bear Lake County Library  
Paris City Library

A review was placed on the county website with guidance on obtaining or reviewing a copy of the plan. A public service announcement was also broadcast courtesy of the local radio station. Copies of announcements can be found in appendix D.

### **3.3 Interviews with Public Officials**

To obtain data for the community profile (Form 3) and to complete the potential mitigation possibilities for hazards identified, North Wind Inc. and Bear Lake Regional Commission personnel conducted interviews with the Bear Lake County Volunteer Fire Department Fire Chief, the Montpelier Fire Chief, and the Idaho Department of Disaster Services. Other elected officials and the general public provided additional comments at the public meeting and some written comments were received after the public meeting.

## **4.0 GENERAL SUMMARY: FIRE HAZARD, STRUCTURAL ASSESSMENT, AND COMMUNITY PROFILE**

### **4.1 Form 1: Fire Hazard Assessment**

Within the assessment area, the dominant fuel in and adjacent to communities and subdivisions is a mixture of grass, sagebrush, aspen, cottonwood, and conifer stands. With the exception of the subdivisions around Bear Lake and Bailey Creek, most of the assessment area is still grazed and harvested. Those areas relegated to recreational housing contain tall, dense grasses with medium to heavy letter, and an overstory of dense sagebrush. Bailey Creek was particularly heavily vegetated due to the predominant north aspect. Conifer stands were limited to the areas facing north or the lee side of the mountain or wet areas and mountainous regions above 8000 feet. Regardless of the location there is a high probability of fire, which, with proper weather conditions, could spread very rapidly across the landscape in most areas.

Below is a summary of each of the elements assessed. The complete results are shown in Table 2.

- Slope: Slopes within the assessment area had a range of 2% to over 30% in some of the steeper canyons and along the scarp face of the east side of Bear Lake and the west slope of the Pruess Mountain Range (Appendix A: Figure 5).
- Aspect: Most of the communities in the assessment area are built in flat valley locations. Exceptions to this rule are the subdivisions around Bear Lake and Bailey Creek which faces north (north aspect).
- Elevation: Elevations within the assessed communities and subdivisions vary by small amounts. Bailey Creek was the high point at 6,222 ft (amsl) and the subdivisions on the East side of Bear Lake were the low elevations at 5,990 ft (amsl).
- Vegetation Type: Within the assessment area the vegetation is consistent with that found at a location of high elevation, low precipitation and short warm

- growing season. Most of the assessment area is vegetated with prairie and meadow grasses and sagebrush. Bailey Creek which is the only north facing development is heavily vegetated with aspen stands intermingled with conifer stands. Mountain brush such as hawthorn compose medium height vegetation while grasses and sagebrush are predominant at the ground level.
- Fuel Type: Within the assessment area the vegetation is predominantly agricultural (grain and alfalfa) and range grasses mixed with sagebrush. In most places, grasses will carry fire to the sagebrush. The sagebrush will be the carrier of fire to trees potentially resulting in crown fire.
  - Fuel Density: 93% of the developments within the assessment area had broken fuel beds while the remaining sites had continuous fuel bed, which would provide fuel ladders and a potential for crown fires.
  - Fire Occurrence: A history of fire occurrence within the assessment area is shown in Appendix A: Figure 2.

## **4.2 Form 2: Structural Fire hazard Assessment**

A general evaluation of the Bear Lake Assessment area found that there are two distinct regions of the county. The southern portion around the lake and the rest of the county. The southern portion of the county is mostly second-home and recreational housing with high, urban density homesites. Homesites around Bear Lake also had the least survivable space with vegetation growing up to the side of the buildings. The northern portion of the county is agricultural and contains homesites at significantly lower densities spread out over more ground. Those homes not in communities presented the highest risk because of poor access, least survivable space and vegetation growing up to the buildings.

During the structural fire hazard assessment 35 different subdivisions and communities were visited, some of which are not presently under development. Within the organized subdivisions there are over 2,000 undeveloped lots.

Condition of buildings in the assessment area range from old and dilapidated to new. The developments around Bear Lake contain many of the newest buildings with most less than 10 years old. The agricultural communities have mostly older buildings with very old outbuildings. Often the residences are brick or stone construction while outbuildings are older and made of wood. Most of the homes regardless of age consist of composition shingle construction or metal roof with few consisting of wood shingles. Several of the subdivisions on the east side of Bear Lake are approaching build out and resemble high density housing developments. Some subdivisions contain fire hydrants installed many years ago and do not possess the capacity for fighting fire in high density conditions. Utilities in most areas are buried, but most homes are heated with propane. Propane is stored on property in storage tank, which could rupture under conducive conditions.

The type of roads within the subdivisions varies from two-lane black top to single track native soil without turnouts or big enough cul-de-sacs at the road end for fire trucks to maneuver in. Road maintenance also varies by subdivision, but in all subdivisions it does not appear adequate for the traffic using the gravel or dirt surfaced roads with steeper

grades. The access into the individual homes is generally a very narrow dirt or rock driveway with insufficient space to turn fire equipment around. Many of the older narrow roads are already being encroached by native vegetation in the near future access with normal fire equipment during an evacuation will become more difficult.

The results of the structure survey are shown in Appendix C. The main points are summarized below.

- Structure Density: 80% of the homesites inventoried had densities less than one unit per acre. 100% of the subdivisions inventoried around Bear Lake had homesites on less than 1 acre and resembled high density urban housing. There are some 20 acre parcels separating the Bear Lake West subdivisions but few of these have been constructed. Undeveloped areas around Bear Lake will likely see continued pressure to subdivide and grow with densities around 1 unit per acre.
- Proximity to Fuels: All of the subdivisions are rated as having flammable fuels within 40 feet of the structures (Class C). Most homesites have fuels such as grass and sagebrush growing under siding or roofing. There were only a few lots within the subdivisions that had defensible space designed into the landscaping around the dwellings and only a few of those maintained a green space. The homes presently under construction have minimal clearing in the shrub or tree stand and this will decrease further unless the owner undertakes a program to maintain a defensible space. Homesites in the outlying areas of the county commonly have defensible space on three sides with the south side lined with trees for protection from wind. Most homesites in the agricultural regions have sufficiently watered lawn surrounding the home.
- Predominant Building Material: Most of the homesites that are related to the mountain or recreation setting are constructed of wood or other flammable exterior while homesites in the outlying and community areas are composed of non-flammable materials such as brick. Roofing material is predominantly metal and organic composite with only a few utilizing wood shingle construction.
- Survivable Space: All of the subdivisions inventoried had less than 10% survivable space while many of the homesites in the rural communities had significant survivable space greater than 40%.
- Roads: Several subdivisions and all communities had sections of maintained two-lane roads. Homesites and subdivisions on the east side of Bear Lake had steep road grades that leveled off as the road proceeded into the subdivision. All of the communities had two lane maintained roads while 60% of the subdivisions had narrow, single lane roads that are not maintained.
- Response Time: 15-20 minutes.

Access: All of the communities in the assessment had more than one entrance/exit that could be used in an emergency. One of the subdivisions had more than one entrance/exit that could be used in an emergency and large enough to accommodate fire equipment. Most (80%) of the subdivisions had narrow, single lane, and/or steep road grades with no turnaround space for fire equipment (Class C). Four wheel drive roads to some of the

more remote scattered parcels would require smaller brush engines and stream crossings in some areas would limit structural fire fighting equipment and require extensive hose layers.

#### 4.3 USDA Forest Service Assessment

Within Bear Lake County are USDA Forest Service administered lands. These lands have fuels treatments scheduled to be performed or have been performed in the past. Visual depiction of the size and location of these controlled treatments are found in Appendix A: Figure 6. Table 2 provides information relating to the fuels treatments that have occurred in the county in the past and those yet to perform. Size of the treatment and what will be treated are also included. The Forest Service has also outlined the areas of emphasis for fuels treatment and areas of concern within the county (Appendix A: Figure 7).

**Table 2. Past and Present fuels treatments as prescribed by the USDA Forest Service**

##### Past

Name/Location	Year	Acres	Objectives
Dry Basin	1999	350	Veg.-Wildlife
Whiskey Flat	1999	745	Veg.-Wildlife
South Ant	1999	571	Veg.-Wildlife
White Pine	1999	32	Veg.-Wildlife
Crib Spring	2001	175	Veg.-Wildlife

##### Planned

Name/Location	Year	Acres	Objectives
Hollows	2004	2235	Fuels/Veg.
Fox Flat	2004	75	Veg.-Wildlife